



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,244	07/31/2000	Chris Heflin	11SW-4906	3875

7590

09/26/2003

John S Beulick  
Armstrong Teasdale LLP  
One Metropolitan Square Suite 2600  
St. Louis, MO 63102

EXAMINER

LEE, KYUNG S

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 09/26/2003

#11

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/629,244

Applicant(s)

HEFLIN ET AL.

Examiner

Richard K. Lee

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 1,2,4,5,11,13,18,20,26-28,34,35 and 40-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,6-10,14-16,19,21,29-33 and 36-39 is/are rejected.
- 7) ☒ Claim(s) 12, 17 and 22-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3&6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group II (claims 3, 6-10, 12, 14-17, 19, 21-25, 29-33 and 36-39) in Paper No. 10 is acknowledged. The traversal is on the ground(s) that "Search in one group would be relevant to the other group" and "requirement for restriction is not mandatory under 35 U.S.C." This is not found persuasive because the process as claimed can be used to make other materially different product such as a position sensor as shown by Hini (4,041,371; provided with prior action). Further, the product claimed can be made by another and materially different process such as having a plurality of movable contacts associated with each one of the phase plates. Restriction requirements are made under 35 U.S.C. 121.

The requirement is still deemed proper and is therefore made FINAL. In response to this action, the non-elected claims should be canceled.

### ***Claim Objections***

2. Claims 10, 12, 14, 19, 21-25 and 29-33 are objected to because of the following informalities: Claim 10 depends on claim 3d. Claim 12 depends on claim 3f. Claim 14 depends on claim 3h. Claims 19 and 21-25 depend on claim 6a, 6c, 6d or 6e. Claims 29-33 depend on claims 7b or claim 7d. Claim dependency is in an improper form. Accordingly, claims 10, 12, 14, 19, 21-25 and 29-33 have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2832

4. Claims 6-8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 6-8 and 9 recite the limitation "said movable contact pads" in line 2 of each claim. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 3 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Sharaf et al. (5,638,948).

Sharaf et al. teaches a transfer switch comprising:

a plurality of phase plates (see fig. 1, not numbered) are symmetrical about the centerline I;

a plurality of stationary contacts 62 with pads 64 with each phase plate, each pad associated with power source (inherent; see col. 5, line 4);

a movable contact 56 associated with each phase plate; and

a shaft 44 connects the phase plates and movable contacts 56 are mounted upon the shaft 44.

Regarding claim 8, the moveable pads 60 comprise a curved surface.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6, 7, 19 and 21 (upon proper dependency of claims 19 and 21) are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharaf et al. in view of Okutomi et al. (6,024,896).

Sharaf et al. teaches the claimed invention except for a movable contact pad comprising silver and tungsten.

Okutomi et al. discloses that current chopping and anti-restriking" would be improved with contact material comprising silver and tungsten. One skilled in the art, at the time of the invention, would have found it obvious to provide the contact pads of Sharaf et al. with Okutomi et al. for the purpose of improving current-chopping and anti-restrike characteristics of the pads.

Regarding claim 7, Okutomi et al. discloses the pads comprising of tungsten ranging from 36-85 percent with balance being silver (see TABLE 1).

Regarding claim 21, see fig. 1 of Sharaf et al.

***Claim Rejections - 35 USC § 103***

10. Claims 9 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharaf et al. in view of Okutomi et al. as applied to claim 3 above, and further in view of Russo et al. (4,071,835).

Sharaf et al. and Okutomi et al. teach the claimed invention except for a contact pad comprises a waffle-patterned brazed surface.

Russo et al. discloses a waffle-patterned contact surface (see col. 1, line 46) in attempt to wipe away contaminating materials at the contact surface. One skilled in the art, at the time of the invention, would have found it obvious to a contact pad comprising "a waffle surface" for the purpose of wiping away contaminating materials from the contact surface, as disclosed by Russo et al.

Regarding claims 15 and 16, Russo et al. discloses the sweeping action of the contact pads for the purpose of wiping away contaminating materials from the contact surface.

11. Claims 10 and 14 (upon proper dependency of claims 10 and 14) are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharaf et al. and Okutomi et al. in view of Russo et al. as applied to claim 9 above, and further in view of Linscot, Jr. (4,032,057).

Sharaf et al., Okutomi et al. and Russo et al. teach the claimed invention except for the contacts pad surface brazed with BcuP5 alloy.

Linscot, Jr. teaches a contact surface brazed with BCUP-5 alloy (see col. 3, line 6). Linscot, Jr. discloses that BCUP-5 alloy is known suitable braze material.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to select any of known suitable braze material. Such selection would be within the level of ordinary skilled in the art.

*Allowable Subject Matter*

12. Claims 12, 17, 22-25 (upon proper dependency of claims 12 and 22-25) and 36-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2832

Claimed limitations of claims 12, 17 and 22-25 are not disclosed by the prior art of record.

Regarding claims 36-39 prior art of record does not disclose or suggest the transfer switch having two identical arc chute plates being composed of molded thermoset plastic.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard K. Lee whose telephone number is (703) 306-9060. The examiner can normally be reached on Mon. to Thur. 5:30AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (703) 308-7619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Richard K. Lee  
Examiner  
Art Unit 2832

